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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.   (currently amended) A storage system group comprising:

a first storage system coupled to a host device for sending data to and ~~configured to receive~~ receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives; and

a second storage system coupled to said first storage system for receiving data from said first storage system,

wherein said first storage system comprises:

a first storage area for writing the data received from said host device, the first storage area being ~~defined on~~ configured by at least [[on]] one of the disk drives; and

a second storage area for writing the data written in said first storage area and update information relating to said data, the second storage area being ~~defined on~~ configured by at least [[on]] one of the disk drives;

said second storage system comprises a third storage area for storing the data read from said second storage area and the update information relating to said data, [[where]] wherein the data and update information to be stored in said third storage area are read from said first storage system ~~at given time intervals~~;

the second storage system sends to the first storage system a command requiring the transmitting of the data stored in the second storage area and the update information relating to the data; and

the first storage system transmits the data stored in the second storage area and the update information relating to the data to the second storage system in response to the command.

2.   (currently amended) The storage system group according to claim 1, wherein the data and update information to be stored in the third storage area are read from the first storage system at various time intervals,

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wherein said second storage system defines said time intervals according to a number of data read from said second storage area,

wherein said second storage area includes a first region for storing the update information and a second region for storing the data, and

wherein said second storage system further includes a fourth storage area to store the data obtained from the third storage area without the update information.

3.   (currently amended) The storage system group according to claim 1,

wherein the data and update information to be stored in the third storage area are read from the first storage system at certain time intervals,

wherein said second storage system defines said time intervals according to a traffic of data sent and received between said first storage system and said second storage system,

wherein said second storage area includes a first region for storing the update information and a second region for storing the data, and

wherein said second storage system further includes a fourth storage area to store the data obtained from the third storage area without the update information.

4.   (currently amended) The storage system group according to claim 1,

wherein the data and update information to be stored in the third storage area are read from the first storage system at given time intervals,

wherein said second storage system defines said time intervals according to a storage capacity of said third storage area.

5.   (currently amended) The storage system group according to claim 1,

wherein the data and update information to be stored in the third storage area are read from the first storage system at various time intervals,

wherein said second storage system defines said time intervals according to a processing load of said second storage system,

wherein said second storage area includes a first region for storing the update information and a second region for storing the data, and

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wherein said second storage system further includes a fourth storage area to store the data obtained from the third storage area without the update information.

6.   (currently amended) The storage system group according to claim 1, wherein the data and update information to be stored in the third storage area are read from the first storage system at certain time intervals, wherein said second storage system reads from said first storage system information relating to a storage capacity of said second storage area in said first storage system and defines said time intervals according to said information, wherein said second storage area includes a first region for storing the update information and a second region for storing the data, and wherein said second storage system further includes a fourth storage area to store the data obtained from the third storage area without the update information.

7.   (previously presented) The storage system group according to claim 1, wherein the update information to be written to said second storage area relates to an update sequence of the data that is to be written to said first storage area.

8.   (currently amended) The storage system group according to claim 7, wherein the data and update information to be stored in the third storage area are read from the first storage system at given time intervals, wherein said first storage system possesses management information relating to said second storage area; and said second storage system reads from said first storage system the management information relating to said second storage area which is possessed by said first storage system and defines said time intervals according to said management information.

9.   (previously presented) The storage system group according to claim 1, wherein a plurality of said first storage areas is provided; and the information that is to be written in said second storage area is obtained by taking as an object the data that are to be written in said plurality of first storage areas.

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10. (original) The storage system group according to claim 9, wherein the update information to be written in said second storage area relates to the update sequence of the data that is to be written in said plurality of first storage areas.

11. (currently amended) The storage system group according to claim 9, wherein the data and update information to be stored in the third storage area are read from the first storage system at various time intervals,

wherein said first storage system allocates said second storage area as a storage area for the update information of the data that is to be written in said plurality of first storage areas and possesses the management information relating to said second storage area; and

said second storage system reads from said first storage system the management information relating to said second storage area possessed by said first storage system, said second storage system defining said time intervals according to said management information.

12. (currently amended) The storage system group according to claim 1, wherein the said second storage system sends to the said first storage system at certain said time intervals a command requiring the transmitting of the data stored in the said second storage area and the update information relating to the said data.; and said first storage system transmits the data stored in said second storage area and the update information relating to said data to said second storage system in response to said command.

13. (original) The storage system group according to claim 1, wherein said second storage system has a fourth storage area corresponding to said first storage area in said first storage system and stores data in said fourth storage area based on the update information and data stored in said third storage area.

14. (previously presented) The storage system group according to claim 13, wherein said second storage system controls the timing of the process for storing data in said fourth storage area according to a processing load of said second storage system.

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15.   (previously presented) The storage system group according to claim 1,

wherein said first storage system comprises a host adapter for sending data to and receiving data from the host device, a cache for retaining the data received by said host adapter, a disk adapter for transferring the data stored in said cache, and a plurality of disk drives for storing the data according to control of said disk adapter; and

said first storage area and said second storage area are allocated from a storage area in said plurality of disk drives.

16.   (original) The storage system group according to claim 1,

wherein said second storage system comprises a host adapter for sending data to and receiving data from the host device, a cache for retaining the data received by said host adapter, a disk adapter for transferring the data stored in said cache, and a plurality of disk drives for storing the data according to said disk adapter control; and

said third storage area is allocated from a storage area in said plurality of disk drives.

17.   (currently amended) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor [[to]] used to control the disk drives;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing the data written in said first storage area in said first storage system and update information relating to said data;

said third storage system comprises a third storage area for storing the data read from said second storage area in said second storage system and update information relating to said data; and

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the data and update information to be stored in said third storage area are read from said second storage system ~~at given time intervals,~~

the third storage system transmits a command to the second storage system; and

the second storage system transmits the data stored in the second storage area and the update information relating to the data to the third storage system in response to the command.

18.   (currently amended) The storage system group according to claim 17, wherein the data and update information to be stored in the third storage area are read from the second storage system at various time intervals, and wherein said third storage system defines said time intervals according to a number of data read from said second storage area.

19.   (currently amended) The storage system group according to claim 17, wherein the data and update information to be stored in the third storage area are read from the second storage system at certain time intervals, and wherein said third storage system defines said time intervals according to a data traffic exchanged between said second storage system and said third storage system.

20.   (currently amended) The storage system group according to claim 17, wherein the data and update information to be stored in the third storage area are read from the second storage system at given time intervals, and wherein said third storage system defines said time intervals according to a storage capacity of said third storage area.

21.   (currently amended) The storage system group according to claim 17, wherein the data and update information to be stored in the third storage area are read from the second storage system at various time intervals, and wherein said third storage system defines said time intervals according to a processing load of said third storage system.

22.   (currently amended) The storage system group according to claim 17,

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wherein the data and update information to be stored in the third storage area are read from the second storage system at various time intervals, and

wherein said third storage system reads from said second storage system the information relating to the storage capacity of said second storage area in said second storage system and defines said time intervals according to said information.

23.   (original) The storage system group according to claim 17, wherein the update information to be written into said second storage area relates to the update sequence of the data that is to be written into said second storage area.

24.   (currently amended) The storage system group according to claim 23, wherein the data and update information to be stored in the third storage area are read from the second storage system at various time intervals,

wherein said second storage system possesses management information relating to said second storage area; and

said third storage system reads from said second storage system said management information relating to said second storage area and sets said time intervals according to said management information that has been read.

25.   (currently amended) The storage system group according to claim 17, wherein the said third storage system transmits a command to the said second storage system at certain said time intervals.; and

said second storage system transmits the data stored in said second storage area and the update information relating to said data to said third storage system in response to said command.

26.   (original) The storage system group according to claim 17, wherein said third storage system has a fourth storage area corresponding to said first storage area in said first storage system and stores data in said fourth storage area based on the data and update information stored in said third storage area.

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27. (previously presented) The storage system group according to claim 26, wherein said third storage system controls the timing of the process for storing data in said fourth storage area according to a processing load of said third storage system.

28. (previously presented) The storage system group according to claim 17, wherein when said first storage system has written data sent from said host device to said first storage area, the first storage system transmits the data written in said first storage area to said second storage system; and

said second storage system writes the data written in said first storage area of said first storage system and update information relating to said data into said second storage area.

29. (currently amended) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing data received from said first storage system and a third storage area for writing the data written into said second storage area and update information relating to said data;

said third storage system comprises a fourth storage area for storing data read from said third storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said fourth storage area are read from said third storage system ~~at given time intervals~~,

the third storage system transmits a command to the second storage system; and

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the second storage system transmits the data stored in the third storage area and update information relating to the data to the third storage system in response to the command.

30.   (currently amended) The storage system group according to claim 29, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at various time intervals, and

wherein said third storage system sets said time intervals according to a number of data read from said third storage area.

31.   (currently amended) The storage system group according to claim 29, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at certain time intervals, and

wherein said third storage system sets said time intervals according to a data traffic exchanged between said second storage system and said third storage system.

32.   (currently amended) The storage system group according to claim 29, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at various time intervals, and

wherein said third storage system conducts the control so as to determine said time intervals according to a storage capacity of said fourth storage area.

33.   (currently amended) The storage system group according to claim 29, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at certain time intervals, and

wherein said third storage system sets said time intervals according to a processing load of said third storage system.

34.   (currently amended) The storage system group according to claim 29, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at given time intervals, and

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wherein said third storage system reads from said second storage system information relating to the storage capacity of said third storage area in said second storage system and sets said time intervals according to said information.

35.   (original) The storage system group according to claim 29, wherein the update information to be written into said third storage area relates to the update sequence of the data to be written into said second storage area.

36.   (currently amended) The storage system group according to claim 35, wherein the data and update information to be stored in the fourth storage area are read from the third storage system at various time intervals,

wherein said second storage system possesses management information relating to said third storage area; and

said third storage system reads from said second storage system the management information relating to said third storage area and sets said time intervals according to said management information that has been read.

37.   (currently amended) The storage system group according to claim 29,

wherein the ~~said~~ third storage system transmits a command to the ~~said~~ second storage system at certain ~~said~~ time intervals.~~; and~~

~~said second storage system transmits the data stored in said third storage area and update information relating to said data to said third storage system in response to said command.~~

38.   (original) The storage system group according to claim 29, wherein said third storage system has a fifth storage area corresponding to said second storage area in said second storage system and stores data in said fifth storage area based on the data and update information stored in said fourth storage area.

39.   (previously presented) The storage system group according to claim 38, wherein said third storage system controls the timing of the process for storing data in said fifth storage area according to a processing load of said third storage system.

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40.   (currently amended) A storage system provided in a storage system group including two or more storage systems and at least one host, the storage system comprising:

a network interface used to coupled the storage system to a remote computer system;

a plurality of storage devices configured to store data or management information;

a storage adaptor configured to control the plurality of storage devices;

a first storage area ~~defined on~~ configured by at least one of the storage devices, the first storage area being configured to store write data transmitted by the host; and

a second storage area ~~defined on~~ configured by at least one of the storage devices, the second storage area being configured to store a journal, the journal including journal data and update information corresponding to the journal data, the journal data corresponding to the write data,

wherein the storage system transmits the journal stored in the second storage area to a remote storage system for data mirroring, the journal being stored in a third storage area of the remote storage system,

wherein the remote storage system sends to the storage system a command requiring the transmitting of the journal stored in the second storage area; and

wherein the storage system transmits the journal stored in the second storage area to the remote storage system in response to the command.

41.   (previously presented) The storage system of claim 40, wherein the write data of the journal is stored in a fourth storage area of the remote storage system to mirror the first storage area of the storage system, the fourth storage area not including the update information,

wherein the storage system is a disk array unit, the network interface is a host adaptor or channel adaptor, the storage devices are hard disk drives, and the storage adaptor is a disk adaptor.

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42.   (previously presented) The storage system of claim 40, wherein the first and third storage areas are storage volumes, where the second and fourth storage areas are journal volumes, each having two different regions for storing write data and update information, respectively.

43.   (new) The storage system group according to claim 1, wherein the sending the command from the second storage system to the first storage system and the transmitting the data from the first storage system to the second storage system are processed at different timing about different data received from the host device to first storage system during different time periods.

44.   (new) The storage system group according to claim 17, wherein the transmitting the command from the third storage system to the second storage system and the transmitting the data from the second storage system to the third storage system are processed at different timing about different data received from the host device to the first storage system during different time periods.

45.   (new) The storage system group according to claim 29, wherein the transmitting the command from the third storage system to the second storage system and the transmitting the data from the second storage system to the third storage system are processed at different timing about different data received from the host device to the first storage system during different time periods.

46.   (new) The storage system group according to claim 40, wherein the sending the command from the remote storage system to the storage system and the transmitting the journal from the storage system to the remote storage system are processed at different timing about different data transmitted from the host to the storage system during different time periods.

47.   (new) A storage system group comprising:
        a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives; and

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a second storage system coupled to said first storage system for receiving data from said first storage system,

wherein said first storage system comprises:

a first storage area for writing the data received from said host device, the first storage area being configured by at least one of the disk drives; and

a second storage area for writing the data written in said first storage area and update information relating to said data, the second storage area being configured by at least one of the disk drives;

said second storage system comprises a third storage area for storing the data read from said second storage area and the update information relating to said data, where the data and update information to be stored in said third storage area are read from said first storage system at given time intervals;

wherein said second storage system defines said time intervals according to a storage capacity of said third storage area.

48. (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives; and

a second storage system coupled to said first storage system for receiving data from said first storage system,

wherein said first storage system comprises:

a first storage area for writing the data received from said host device, the first storage area being configured by at least one of the disk drives; and

a second storage area for writing the data written in said first storage area and update information relating to said data, the second storage area being configured by at least one of the disk drives;

said second storage system comprises a third storage area for storing the data read from said second storage area and the update information relating to said data, where the data and update information to be stored in said third storage area are read from said first storage system at given time intervals;

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wherein said second storage system reads from said first storage system information relating to a storage capacity of said second storage area in said first storage system and defines said time intervals according to said information,

wherein said second storage area includes a first region for storing the update information and a second region for storing the data, and

wherein said second storage system further includes a fourth storage area to store the data obtained from the third storage area without the update information.

49.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives; and

a second storage system coupled to said first storage system for receiving data from said first storage system,

wherein said first storage system comprises:

a first storage area for writing the data received from said host device, the first storage area being configured by at least one of the disk drives; and

a second storage area for writing the data written in said first storage area and update information relating to said data, the second storage area being configured by at least one of the disk drives;

said second storage system comprises a third storage area for storing the data read from said second storage area and the update information relating to said data, where the data and update information to be stored in said third storage area are read from said first storage system at given time intervals;

wherein a plurality of said first storage areas is provided; and the information that is to be written in said second storage area is obtained by taking as an object the data that are to be written in said plurality of first storage areas;

wherein said first storage system allocates said second storage area as a storage area for the update information of the data that is to be written in said plurality of first storage areas and possesses the management information relating to said second storage area; and said second storage system reads from said first storage system the management information relating to said second storage area possessed by said first storage system, said

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second storage system defining said time intervals according to said management information.

50.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing the data written in said first storage area in said first storage system and update information relating to said data;

said third storage system comprises a third storage area for storing the data read from said second storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said third storage area are read from said second storage system at given time intervals,

wherein said third storage system defines said time intervals according to a storage capacity of said third storage area.

51.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device, the first storage system including a plurality of disk drives and a disk adaptor used to control the disk drives;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

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wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing the data written in said first storage area in said first storage system and update information relating to said data;

said third storage system comprises a third storage area for storing the data read from said second storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said third storage area are read from said second storage system at given time intervals,

wherein said third storage system reads from said second storage system the information relating to the storage capacity of said second storage area in said second storage system and defines said time intervals according to said information.

52.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing data received from said first storage system and a third storage area for writing the data written into said second storage area and update information relating to said data;

said third storage system comprises a fourth storage area for storing data read from said third storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said fourth storage area are read from said third storage system at given time intervals,

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wherein said third storage system conducts the control so as to determine said time intervals according to a storage capacity of said fourth storage area.

53.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing data received from said first storage system and a third storage area for writing the data written into said second storage area and update information relating to said data;

said third storage system comprises a fourth storage area for storing data read from said third storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said fourth storage area are read from said third storage system at given time intervals,

wherein said third storage system reads from said second storage system information relating to the storage capacity of said third storage area in said second storage system and sets said time intervals according to said information.

54.   (new) A storage system group comprising:

a first storage system coupled to a host device for sending data to and receiving data from said host device;

a second storage system coupled to said first storage system for receiving data from said first storage system; and

a third storage system coupled to said second storage system for receiving data from said second storage system;

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wherein said first storage system comprises a first storage area for writing data received from said host device;

said second storage system comprises a second storage area for writing data received from said first storage system and a third storage area for writing the data written into said second storage area and update information relating to said data;

said third storage system comprises a fourth storage area for storing data read from said third storage area in said second storage system and update information relating to said data; and

the data and update information to be stored in said fourth storage area are read from said third storage system at given time intervals,

wherein said third storage system has a fifth storage area corresponding to said second storage area in said second storage system and stores data in said fifth storage area based on the data and update information stored in said fourth storage area.